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## Abstract of the Disclosure

The present invention incorporates one or more diode lasers for the high-power CO<sub>2</sub> or Nd-YAG lasers currently used in closed-loop DMD systems. Being semiconductor-based, such devices are almost instantaneously responsive to the electrical input. As such, a DMD system driven by a diode laser according to the invention provides a much faster response compared to other sources. The faster response time, in turn, provides for enhanced dimensional control and capability to produce intricate components with better dimensional accuracy.